

9-4-01

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PATENT

Attorney Docket No. MICRON.172A

Date: August 30, 2001

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J1011 U.S. PTO  
09/945065

08/30/01

ASSISTANT COMMISSIONER FOR PATENTS

WASHINGTON, D.C. 20231

ATTENTION: BOX PATENT APPLICATION

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): **Ammar Derraa, Sujit Sharan and Paul Castroville**

For:

**METAL SILICIDE ADHESION LAYER FOR CONTACT STRUCTURES**

Enclosed are:

- ☒ (X) 5 sheets of drawings.
- ☐ () Recordation form cover sheet with -page assignment.
- ☐ () A certified copy of a(n) application.
- ☐ () A power of attorney form and copy of assignment.
- ☐ () Initial signed declaration by inventor(s).
- ☒ (X) Return prepaid postcard.

## CLAIMS AS FILED

| FOR  | NUMBER<br>FILED | NUMBER<br>EXTRA | RATE  | FEE   |
|--|-----------------|-----------------|-------|-------|
| Basic Fee  |                 |                 | \$710 | \$710 |
| Total Claims   | 35 - 20 =       | 15 ×            | \$18  | \$270 |
| Independent Claims   | 3 - 3 =         | 0 ×             | \$80  | \$0   |
| If application contains any multiple dependent claims(s), then add |                 |                 | \$270 | \$0   |
| <b>TOTAL FILING<br/>FEE</b>  |                 | \$980           |       |       |

☒ (X) A check in the amount of \$980 to cover the filing fee is enclosed.☐ () A check in the amount of \$40 to cover the assignment recording fee.

Assistant Commissioner for Patents  
Washington, D.C. 20231

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

**Attorney Docket No.** : MICRON.172A

**Applicant(s)** : Ammar Derraa, Sujit Sharan and  
Paul Castroville

**For** : METAL SILICIDE ADHESION LAYER FOR  
CONTACT STRUCTURES

**Attorney** : Michael H. Trenholm

**"Express Mail"**  
**Mailing Label No.** : EL485607165US

**Date of Deposit** : August 30, 2001

I hereby certify that the accompanying *transmittal letter,*

Specification in 16 pages; 5 sheets of drawings; Check for Filing Fee; Return  
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are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

  
Maria Gomez

EXPRESSP

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- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, now or in the future, or credit any overpayment to Account No. 11-1410.
- (X) Please use Customer No. **20,995** for the correspondence address.

Michael H. Trenholm  
Registration No. 37, 743  
Attorney of Record

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| a) $\alpha = 0.05$ |       | b) $\alpha = 0.01$ |       | c) $\alpha = 0.001$ |       |
|--------------------|-------|--------------------|-------|---------------------|-------|
| Test               | Power | Test               | Power | Test                | Power |
| W                  | 0.85  | W                  | 0.75  | W                   | 0.65  |
| L                  | 0.82  | L                  | 0.72  | L                   | 0.62  |
| F                  | 0.80  | F                  | 0.70  | F                   | 0.60  |
| G                  | 0.78  | G                  | 0.68  | G                   | 0.58  |
| H                  | 0.75  | H                  | 0.65  | H                   | 0.55  |
| I                  | 0.72  | I                  | 0.62  | I                   | 0.52  |
| J                  | 0.70  | J                  | 0.60  | J                   | 0.50  |
| K                  | 0.68  | K                  | 0.58  | K                   | 0.48  |
| L                  | 0.65  | L                  | 0.55  | L                   | 0.45  |
| M                  | 0.62  | M                  | 0.52  | M                   | 0.42  |
| N                  | 0.60  | N                  | 0.50  | N                   | 0.40  |
| O                  | 0.58  | O                  | 0.48  | O                   | 0.38  |
| P                  | 0.55  | P                  | 0.45  | P                   | 0.35  |
| Q                  | 0.52  | Q                  | 0.42  | Q                   | 0.32  |
| R                  | 0.50  | R                  | 0.40  | R                   | 0.30  |
| S                  | 0.48  | S                  | 0.38  | S                   | 0.28  |
| T                  | 0.45  | T                  | 0.35  | T                   | 0.25  |
| U                  | 0.42  | U                  | 0.32  | U                   | 0.22  |
| V                  | 0.40  | V                  | 0.30  | V                   | 0.20  |
| W                  | 0.38  | W                  | 0.28  | W                   | 0.18  |
| X                  | 0.35  | X                  | 0.25  | X                   | 0.15  |
| Y                  | 0.32  | Y                  | 0.22  | Y                   | 0.12  |
| Z                  | 0.30  | Z                  | 0.20  | Z                   | 0.10  |
| AA                 | 0.28  | AA                 | 0.18  | AA                  | 0.08  |
| AB                 | 0.25  | AB                 | 0.15  | AB                  | 0.05  |
| AC                 | 0.22  | AC                 | 0.12  | AC                  | 0.02  |
| AD                 | 0.20  | AD                 | 0.10  | AD                  | 0.01  |
| AE                 | 0.18  | AE                 | 0.08  | AE                  | 0.00  |
| AF                 | 0.15  | AF                 | 0.05  | AF                  | 0.00  |
| AG                 | 0.12  | AG                 | 0.02  | AG                  | 0.00  |
| AH                 | 0.10  | AH                 | 0.01  | AH                  | 0.00  |
| AI                 | 0.08  | AI                 | 0.00  | AI                  | 0.00  |
| AJ                 | 0.05  | AJ                 | 0.00  | AJ                  | 0.00  |
| AK                 | 0.02  | AK                 | 0.00  | AK                  | 0.00  |
| AL                 | 0.01  | AL                 | 0.00  | AL                  | 0.00  |
| AM                 | 0.00  | AM                 | 0.00  | AM                  | 0.00  |
| AN                 | 0.00  | AN                 | 0.00  | AN                  | 0.00  |
| AO                 | 0.00  | AO                 | 0.00  | AO                  | 0.00  |
| AP                 | 0.00  | AP                 | 0.00  | AP                  | 0.00  |
| AQ                 | 0.00  | AQ                 | 0.00  | AQ                  | 0.00  |
| AR                 | 0.00  | AR                 | 0.00  | AR                  | 0.00  |
| AS                 | 0.00  | AS                 | 0.00  | AS                  | 0.00  |
| AT                 | 0.00  | AT                 | 0.00  | AT                  | 0.00  |
| AU                 | 0.00  | AU                 | 0.00  | AU                  | 0.00  |
| AV                 | 0.00  | AV                 | 0.00  | AV                  | 0.00  |
| AW                 | 0.00  | AW                 | 0.00  | AW                  | 0.00  |
| AX                 | 0.00  | AX                 | 0.00  | AX                  | 0.00  |
| AY                 | 0.00  | AY                 | 0.00  | AY                  | 0.00  |
| AZ                 | 0.00  | AZ                 | 0.00  | AZ                  | 0.00  |
| BA                 | 0.00  | BA                 | 0.00  | BA                  | 0.00  |
| BB                 | 0.00  | BB                 | 0.00  | BB                  | 0.00  |
| BC                 | 0.00  | BC                 | 0.00  | BC                  | 0.00  |
| BD                 | 0.00  | BD                 | 0.00  | BD                  | 0.00  |
| BE                 | 0.00  | BE                 | 0.00  | BE                  | 0.00  |
| BF                 | 0.00  | BF                 | 0.00  | BF                  | 0.00  |
| BG                 | 0.00  | BG                 | 0.00  | BG                  | 0.00  |
| BH                 | 0.00  | BH                 | 0.00  | BH                  | 0.00  |
| BI                 | 0.00  | BI                 | 0.00  | BI                  | 0.00  |
| BJ                 | 0.00  | BJ                 | 0.00  | BJ                  | 0.00  |
| BK                 | 0.00  | BK                 | 0.00  | BK                  | 0.00  |
| BL                 | 0.00  | BL                 | 0.00  | BL                  | 0.00  |
| BM                 | 0.00  | BM                 | 0.00  | BM                  | 0.00  |
| BN                 | 0.00  | BN                 | 0.00  | BN                  | 0.00  |
| BO                 | 0.00  | BO                 | 0.00  | BO                  | 0.00  |
| BP                 | 0.00  | BP                 | 0.00  | BP                  | 0.00  |
| BQ                 | 0.00  | BQ                 | 0.00  | BQ                  | 0.00  |
| BR                 | 0.00  | BR                 | 0.00  | BR                  | 0.00  |
| BS                 | 0.00  | BS                 | 0.00  | BS                  | 0.00  |
| BT                 | 0.00  | BT                 | 0.00  | BT                  | 0.00  |
| BU                 |       |                    |       |                     |       |